ON THE DIAGNOSIS OF PANCREATIC DISEASE IN ITS BEAR-ING ON THE SURGERY OF THE LIVER.

The recent advances in abdominal surgery render every point of diagnostic import valuable, and thus all cases bearing upon points of diagnosis are noteworthy at the present time. The occurrence of clay-colored stools is usually accredited to some form of biliary obstruction, but that there may be other causes of these stools is rendered probable by a consideration of two cases read before the Royal Medical and Chirurgical Society of London on March 26, 1889, by T. I. Walker, M.D., of Peterborough. In these cases absence of color in the foces was persistent and there was no jaundice. At the necropsy a healthy condition of the bile ducts was discovered, but the pancreatic duct was obstructed. Dr. Walker concluded from his cases that the formation of the coloring matter of the fæces depended on the mutual reaction of the bile and pancreatic fluid under the influences met with in the intestinal tract; also that in disease a deficiency of pancreatic fluid would, equally with a deficiency of bile, cause the pathological clay-colored stools, and lastly, that as (in his opinion) the coloring matter of the seces could not be produced without the aid of the pancreas, that organ must bear an important part in regulating what proportion of the bile entering the intestines shall be absorbed and what thrown off in the fœces. Further reports of cases such as these would be extremely interesting; at the same time the greatest care should be taken that no extraneous cause of pressure on the common bile duct should be overlooked.

A case reported by Dr. Herringham before the Medical Society of London on April 30, 1888, bears on this point. In this case a man, act. 63 years, was seized with violent pain in the abdomen and rigors, becoming jaundiced after ten days. The liver was enlarged and the gall-bladder could be felt as a rounded tumor reaching to the umbilicus. A diagnosis was made of obstruction of the bile duct by a gall stone. Subsequently cholecystotomy was performed by Mr. C. B Keet-

ley. At the necropsy cancer of the head of the pancreas was found and the common bile duct was in a perfectly healthy condition.

It will be noticed that in Dr. Walker's cases there was no jaundice. while in Dr. Herringham's case it was present, and clearly also biliary obstruction. From all these cases it would appear that the condition of the pancreas may be of importance in arriving at a correct diagnosis in a case of biliary obstruction or in a case presenting the symptom of clay-colored stools. The diagnosis of impacted gall-stones is, in the light of these cases, rendered more difficult. A therapeutic point of interest also arises, namely, that the beneficial action of mercury in biliary affections may be due more to its action on the pancreas than by its directly stimulating the secretion of the liver.

Pancreatic cysts may cause the same symptoms as were observed in Dr. Herringham's case. To assist diagnosis it is well to bear in mind the other symptoms of pancreatic disease. Too much stress is not to be laid on the presence of undigested fats in the faces. There is generally evidence of undigested nitrogenous matters as well.

Other symptoms are pain of a burning character at the epigastrium, sick-headache, vomiting, anorexia, emaciation, sallowness or even bronzing of the skin and ædema of the feet.

Not untrequently diabetes has been observed and diarrheea may occur from excess of pancreatic secretion. Pancreatic cysts, according to Prof. Küster, when they form appreciable tumors, may be mistaken for hydatid cysts of the liver, mesentery or kidneys, lymphatic cysts or aneurisms of the aorta or its branches. In women they may easily be mistaken for ovarian cysts unless the direction of growth is clearly noted. Minkowski states that great assistance can be derived in diagnosing cysts of the pancreas by observing the changes in position which result from distending the stomach with carbonic acid by administering bicarbonate of soda and tartaric acid and by means of filling the large intestine with water. Under these circumstances a cyst of the pancreas behaves almost exactly like a tumor of the kidney, from which, however, it may be diagnosed by the symptoms mentioned above and by special symptoms referred to the kidney.

The fluid from a pancreatic cyst if sufficient quantity is obtained by

aspiration will be found to exhibit strong power of digestion. The absence of hooklets will serve to distinguish it from the fluid of an hydatid cyst. The significance of persistent clay-colored stools as a symptom of liver disease is undoubtedly modified by a consideration of Dr. Walker's cases, and the presence or absence of jaundice concomitantly with this symptom should be carefully looked for. The clay-colored stools apparently owe their color, not entirely to the absence of pigment, but largely to the presence of unabsorbed fats. In healthy persons from 6 to 10% of the ingested fats are found in the feeces, and in cases of biliary obstruction from 52 to 78% (Müller). The pancreatic juice acts upon the fats, but not sufficiently to render them absorbable without the presence of bile. On the other hand in pancreatic obstruction the fats lack the action of the pancreatic fluid. and if Dr. Walker be right in his contention that the pancreatic secretion is the efficient cause in the production of hydrobilirubin, the stools will be equally as in biliary obstruction, clay-colored, both from excess of fat and absence of pigment. H. CAMPBELL POPE.

STUDIES IN ACTINOMYCOSIS.

The cases of human actinomycosis are as yet so limited that Dr. Baracz, up to December, 1887, has only been able to collect 107 recorded cases. He reports the three following cases:

CASE I. Male, act. 30 years, cab-driver, states that in December, 1886, he suffered from toothache during several weeks, and that he went to a dentist and had the painful tooth extracted. Soon after he noticed a slowly growing painful tumor on the face, corresponding to the place from which the tooth had been removed. This tumor interfered with the motions of the jaw.

The patient was seen by the author on January 9, 1887. Examination of the mouth showed that all the remaining lower molar teeth on

¹Transmissibility of Actinomycosis from Man to Man, by DR. ROMAN v. BARACZ (Lemberg). Wiener Medizinische Presse, No. 1, 1889.

Actinomycosis of the Base of the Skull. By Dr. NASSE (Berlin). Deutsche Medizinische Wochenschrift, No. 5, 1889.